

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/AU2004/001320

## A. CLASSIFICATION OF SUBJECT MATTER

Int. Cl. <sup>7</sup>: G08B 29/12, 29/00, G01F 1/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

DWPI, USPTO, ESP@CE: keywords-smoke, particle, pollution, detector, sensor, flow, sample, inlet, port, upstream, rate, maintenance, blockage, abnormality, fault, meter, measure and similar terms

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2000/003224 A1 (HORIBA INSTRUMENTS, INC) 20 January 2000 See figure 2 items 56, 60, and page 11 line 13 to page 13 line7	10 and 11
A		1 to 9, 12 to 23
P, A	US 6679103 B1 (SADLER) 20 January 2004 Abstract and item 64	1 to 11
A	GB 2140163 A (COULTER ELECTRONICS LIMITED) 21 November 1984 See the abstract	1 to 11
A	Derwent abstract accession number 84-067024/11, Class Q75, SU 989271 A (ZHARKIKH AG) 15 January 1983	1 to 11

☒ Further documents are listed in the continuation of Box C

☒ See patent family annex

* Special categories of cited documents:	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E" earlier application or patent but published on or after the international filing date	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&" document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search  
24 November 2004

Date of mailing of the international search report  
3 DEC 2004

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6439062 B2 (STARK et al) 27 August 2002, see figure 13 and column 7 lines 50 to 67	18 and 19
A		12 to 17, 20 to 23
A	Patent Abstracts of Japan JP 11-224386 A (HOCHIKI CORP) 17 August 1999	12 to 23
A	WO 1996/007166 A1 (SCHEEFER) 7 March 1996	12 to 23
A	US 5477218 A (MANMOTO et al) 19 December 1995, see figure 30(a)	12 to 23
A	FR 2254073 A1 (JOLIOT A) 8 August 1975	12 to 23
A	US 3693401 A (PURT et al) 26 September 1972	12 to 23

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/AU2004/001320

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report			Patent Family Member		
WO	2000/003224	GB	2356254	US	6505524
US	6679103	NONE			
GB	2140163	AU	29687/84	EP	0143837
		WO	1984/004593	US	4718270
SU	989271	NONE			
US	6439062	CA	2290042	US	6267013
				US	2001054320
JP	11224386	NONE			
WO	1996/007166	AU	32614/95	EP	0777896
				FR	2724247
US	5477218	DE	4400363	GB	2274333
				JP	7151680
FR	2254073	NONE			
US	3693401	CH	501284	DE	2054027
		GB	1305125	FR	2069366
Due to data integration issues this family listing may not include 10 digit Australian applications filed since May 2001.					
END OF ANNEX					